

REMARKS

Claims 1, 3 – 13 and 40 – 49 are now pending in the application. A minor amendment has been made to claim 41 to correct a possible ambiguity. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 2, 7, 10, 40, 41, 46 and 47 stand rejected under 35 U.S.C. 102(b) as being anticipated by De Cesare (U.S. 4,883,997). Claims 1, 11 and 40 are the independent claims. Applicants have amended claims 1 and 11 to more particularly point out and distinctly claim patentable features of the invention. For the reasons discussed below, applicants submit that amended claims 1, and 11 are allowable over De Cesare. Applicants further submit that De Cesare does not anticipate claim 40, as discussed below.

Applicants have amended claims 1 and 11 and submit that De Cesare does not anticipate claims 1 and 11 as amended. The Examiner takes the position that De Cesare's coils 24a, 24b have end turns that enclose De Cesare's rotor 18 and also discloses a winding form 118 configured to receive coils 24a, 24b. Amended claim 1 now requires "a winding form enclosing the rotor assembly for winding the coils thereon after the rotor has been enclosed by the winding form." Amended claim 11 now requires "a plurality of coils wound upon the winding form after the rotor assembly has been enclosed by the winding form." De Cesare does not disclose that coils 24a and 24b are wound on forms 118 after support 118 is disposed around a part of rotor 18.

Rather, as best applicants can determine, coils 24a, 24b are first wound on forms 118 before they are assembled with rotor 18. [See, De Cesare, Fig. 20; see also De Cesare, col. 10 lines 51 – 57] Applicants submit that De Cesare therefore does not anticipate amended claims 1 and 11.

Claims 7 and 10 depend directly or indirectly from claim 1 and are allowable over De Cesare for at least that reason.

Applicants submit that contrary to the Examiner's position, De Cesare does not disclose "a seal applied to the interface being adapted to seal the air gap such that the air gap is blocked off" as required by claim 40. The Examiner cites to col. 6, lines 51 – 62 as discussing such a seal. However, the discussion in this section of De Cesare says only that the coils 24a, 24b are arranged over the cylindrical rotor space or air gap 16 and therefore overlap or enclose the rotor 18. No seal is mentioned and applicants submit that coils 24a, 24b do not seal the air gap between the stator and the rotor. Rather, referring to Figs. 1 and 3 of De Cesare, it can be seen that there is a gap between coils 24a, 24b at the center of rotor 18 through which the shaft 26 extends. Since coils 24a, 24b have this gap, they do not seal the gap between the rotor 18 and the stator core 12. Applicants therefore submit that claim 40 is not anticipated by De Cesare.

Claims 41, 46 and 47 depend directly or indirectly from claim 40 and are allowable over De Cesare for at least that reason.

REJECTION UNDER 35 U.S.C. § 103

Claims 3 – 6, 8, 9, 11 - 13, 42, 43, 48 and 49 stand rejected under 35 U.S.C. 103(a) based on De Cesare alone or combined with one or more of von der Heide et al. (U.S. 5,382,853), and Nashiki (U.S. 6,252,325).

Claims 3 – 6, 8, 9 and 11 – 13 depend directly or indirectly from amended independent claims 1 or 10. As discussed above, De Cesare does not disclose “a winding form enclosing the rotor assembly for winding said coils thereon after the rotor has been enclosed by the winding form” as required by amended claim 1 or “a plurality of coils wound upon the winding form after the rotor has been enclosed by the winding form” as required by amended claim 11. Further, neither von der Heide et al. or Nashiki disclose this limitation. In this regard, neither von der Heide et al. or Nashiki disclose that the end turns of coils of a brushless DC motor enclose a rotor assembly.

Applicants submit that claims 3 – 6, 8, 9 and 11 – 13 are thus allowable over De Cesare, alone or in combination with one or more of von der Heide et al. and Nashiki.

Claims 42, 43, 48 and 49 depend directly or indirectly from claim 40. As discussed above, De Cesare does not disclose the seal required by claim 40. Neither von der Heide et al. or Nashiki disclose such a seal. Applicants submit that claims 42, 43, 48 and 49 are thus allowable over De Cesare, alone or in combination with one or more of von der Heide et al. and Nashiki.

ALLOWABLE SUBJECT MATTER

The Examiner states that claims 44 and 45 would be allowable if rewritten in independent form. Accordingly, applicants have rewritten claim 44 into independent form incorporating the limitations of independent claim 40 and intervening dependent claim

Serial No. 09/755,330

41. In this regard, applicants submit that the limitations of intervening dependent claim 42 is not necessary to distinguish claim 44 over the prior art and have not included these limitations in rewriting claim 44 into independent form. Applicants have amended claim 45 to include the limitations of intervening dependent claim 42 to provide antecedent basis for certain of the recitations in claim 45. Applicants submit that independent claim 44, and claim 45 which depends directly from independent claim 44, are now in condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: SEP. 15, 2003

By: ROLAND A. FULLER III
Roland A. Fuller III
Reg. No. 31,160

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600